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ABSTRACT

In spring of 1990, pursuant to the federally funded School Health Education Project to Prevent the Spread of Human Immunodeficiency Virus, an annual survey was conducted of Illinois ninth graders (n=1,181) to assess their knowledge, attitudes, and beliefs concerning Acquired Immune Deficiency Syndrome (AIDS). Findings from the 1990 survey are described and comparisons are made with findings from the 1989 survey, and also between Illinois ninth grader data and data collected for adults nationally by the National Center for Health Statistics. Data analysis and reported findings focus on variations according to student gender, ethnicity, and geographic region of the state in: (1) level of knowledge about AIDS; (2) attitudes toward AIDS; and (3) student awareness of information sources and where to get tested for AIDS. These findings suggest that ninth graders are knowledgeable about the major means of transmitting the AIDS virus (sexual intercourse and the sharing of hypodermic needles) and about important prevention measures, but they had misconceptions about transmission of AIDS through blood transfer, along with unfounded and potentially destructive phobias about going to school with a student who has AIDS. Based on these findings, recommendations for Illinois educators are provided. References are included and instrumentation is appended, along with the survey methodology and response rate, geographic categories, and a summary of questionnaire response items. (TE)

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WHAT NINTH GRADERS KNOW ABOUT AIDS: A REPORT ON THE 1990 ILLINOIS AIDS SURVEY

ILLINOIS STATE BOARD OF EDUCATION
Department of Planning, Research, and Evaluation

October, 1990

Thomas Lay Burroughs, Chairman
State Board of Education

Robert Leininger
State Superintendent of Education

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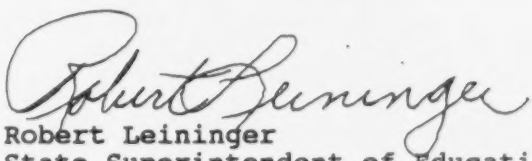
FOREWORD

The Illinois State Board of Education participated in the federally funded School Health Education Project to Prevent the Spread of AIDS (SHEPSHIV). As required by the Centers for Disease Control (CDC) grant U63/CCU503084-02, the Illinois State Board of Education conducted a survey to measure the knowledge and beliefs held by Illinois ninth grade English students concerning Acquired Immunodeficiency Syndrome (AIDS). This report was prepared by Joyce Flood and Dr. Fred Dawson from the Department of Planning, Research, and Evaluation. The interpretations and conclusions expressed herein have been prepared by staff and do not necessarily reflect the position or policy of the Illinois State Board of Education.



Robert Leininger
State Superintendent of Education

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HIGHLIGHTS

Nearly all ninth graders surveyed understand the two major means of transmitting the human immunodeficiency virus (HIV) which causes AIDS: sexual intercourse and the sharing of needles or syringes with a person who is infected with AIDS. Close to 98 percent of the students responded "yes" to the item asking whether a person could get AIDS from sexual intercourse with an infected person, and nearly 99 percent said "yes" to the item asking if a person could get AIDS from sharing needles or syringes with an infected person.

Ninth graders are generally aware of the major means of preventing AIDS. The majority of the survey respondents acknowledged that a person can reduce their chances of becoming infected with the AIDS virus by being abstinent (83%), using condoms (90%), having sex with only one person (80%) and not having sex with intravenous drug users (79%).

Ninth graders realize that it is not just gay men who can become infected with AIDS. Fully 97 percent of those surveyed rejected the statement that "only gay men can get AIDS."

Ninth grade students possess a major misconception about the transmission of the AIDS virus through the transfer of blood. Many students said "yes" or were "not sure" that a person could get AIDS from giving blood, being bitten by a mosquito or having a blood test (65%, 51% and 42%, respectively). Also, only 52 percent believe that blood transfusions are now generally safe.

Ninth graders lack clear understanding about the transmission of the AIDS virus via some forms of casual or indirect contact. Though most students (97%) realize that a person cannot get AIDS from shaking hands, only 59 percent realize that this is also true of kissing on the mouth. Furthermore, only 73 percent acknowledge a person cannot get AIDS from public toilets.

A sizeable percentage of ninth graders do not know where to get correct information about AIDS. Only 63 percent of survey respondents said "yes" they know where to get correct information about AIDS.

Ninth graders are not informed as to where to get tested for AIDS. Only 50 percent of the surveyed students reported knowing where to get tested.

The attitudes of Illinois ninth graders about attending school with students who have AIDS need improvement. Twenty-one percent said "no" or were "not sure" that a student with AIDS should have the right to go to their school. A still greater proportion of students (27%) were not willing or not sure if they were willing to go to class with a student having AIDS.

Compared with minority ninth graders, white, non-Hispanic ninth graders tend to be more informed about AIDS. For 25 out of 26 of the disease specific knowledge questions, white students answered correctly more often than nonwhite students. As example, nearly 89 percent of white students knew that people can reduce their chances of becoming infected with AIDS by being abstinent; however, only 66 percent of nonwhite students were aware of this fact. Also, nearly 83 percent of white students, compared to 67 percent of nonwhite students, realized that people can reduce their chances of getting AIDS by not having sexual intercourse with an intravenous drug user.

Ninth graders in the northern region of the state, excluding Cook and the collar counties, tend to be more knowledgeable about AIDS. Eighty-three percent of the surveyed students in the north, compared to 70 percent of the students in the rest of the state, knew that a person cannot get AIDS from public toilets; and 62 percent, compared to 49 percent, acknowledged that blood transfusions are generally safe.

To a large extent, the AIDS knowledge and attitudes of Illinois ninth graders reflect those of adults nationally. Even misconceptions are shared. For instance, 27 percent of the adults participating in the last quarter of the 1989 National Health Interview Survey answered that it was "somewhat likely" or "very likely" that a person could get AIDS from mosquito bites. This misconception is shared by 23 percent of the Illinois ninth graders.

Though overall disease specific knowledge of AIDS remained consistent between the 1989 and 1990 surveys, there has been improvement in attitudes concerning the school attendance of a student infected with AIDS. While, in 1989, only 69 percent of the ninth graders surveyed believed that a student with AIDS had the right to go to their school, 79 percent of the ninth graders surveyed in 1990 held this opinion. Similarly, only 64 percent of the 1989 ninth graders were willing to go to class with a student with AIDS; but, in 1990, that percentage had climbed to 73.

INTRODUCTION

As of June 30, 1990, the total number of AIDS cases reported for Illinois was 4,115. With no cure in the foreseeable future, this growing number of cases poses a serious health problem for the State and the nation. It is paramount that young people know what AIDS is, how the AIDS virus is transmitted, and what they can do to minimize their risks of exposure to this fatal syndrome.

During fiscal years '89 and '90, the Illinois State Board of Education (ISBE) participated in the federally funded School Health Education Project to Prevent the Spread of HIV (SHEPSHIV). Funding was provided through grants from the Centers for Disease Control (CDC). The purpose of SHEPSHIV was to improve Illinois school instruction concerning the transmission and prevention of HIV/AIDS. For fiscal year (FY) '90, the funding level was $249,000.

During FY '90, the SHEPSHIV Project supplied technical assistance and training to 12 Educational Service Centers (ESCs), who, in turn, provided training to local school districts within their boundaries. By the end of FY '91, 17 ESCs will have received training. Additionally, the project serves as an ongoing resource for ESCs and local districts requiring assistance with AIDS curriculum development.

As required by the CDC grant for the SHEPSHIV, the ISBE conducted an annual survey of Illinois ninth graders to assess their knowledge, attitudes, and beliefs concerning AIDS. This year's survey was conducted in the spring of 1990. Findings from the current year's survey are described in this report, and comparisons are made with findings from the 1989 survey.

Comparisons are also made between the 1990 Illinois ninth grader data and data collected for adults nationally. Since December, 1987, the National Center for Health Statistics has been surveying adults to determine their attitudes and knowledge concerning AIDS. The data are collected quarterly each year as part of the National Health Interview Survey. Though the adult questions are worded somewhat differently from the questions on the Illinois survey for ninth graders, items judged as similar are compared. The adult data used for this study were collected October through December, 1989 (Hardy, 1990).

Data analyses and reported findings focus on the following research questions:

1. To what extent do Illinois ninth graders possess knowledge about the disease AIDS and to what extent does this knowledge vary by student gender, ethnicity, and geographic region of the state?

2. Do Illinois ninth graders' attitudes about AIDS vary by student gender, ethnicity or geographic region of the state?

3. Do Illinois ninth graders know where to obtain correct information about and how to get tested for AIDS, and does this knowledge vary by student gender, ethnicity, and geographic region of the state?

4. How do the Illinois ninth graders compare with adults (based on CDC national data)?

5. How do the results of the 1990 AIDS Survey compare with those of 1989?

METHODS AND PROCEDURES

The Data Collection Instrument

The Illinois instrument (Appendix A) is a modification of the federal CDC form used for its national assessment of knowledge, attitudes, and behaviors related to AIDS.

The Sampling Population

The sample included ninth graders who attended regular English classes during the 1990 spring semester and was drawn from a population of 132,786 ninth graders. Administratively, ISBE staff considered it practical and expedient to survey intact classrooms. English classes were selected as sampling units because English is a required subject for nearly all ninth graders in Illinois (Humm, 1984). Therefore, the sample selected was designed to generalize to all ninth graders who were enrolled in English during the spring of 1990. A more detailed description of methodology and response rate can be found in Appendix B.

Data Classification and Analyses

The survey questions were placed in three categories. Questions 8 and 9 (see Appendix A) asked students if they knew where to obtain correct information about and where to get tested for AIDS. These two questions were categorized as general health information questions. Questions 3, 4 and 5 asked about AIDS education and going to school with students with AIDS. These questions were categorized as attitudinal. With the exception of the demographic questions, the remaining questions were considered to concern disease specific knowledge and were categorized as such. All three categories were analyzed by student gender, ethnicity, and geographic region of the state.

The county in which a school was located determined the geographic region. Counties were grouped into five regions: 1) Cook County, 2) collar counties surrounding Cook County, 3) remaining north 4) central, and 5) south. The five regions and their respective counties are listed in Appendix C.

Limitations

Of the 43 schools initially sampled, only 34 schools actually responded to the survey. The degree to which participant responses reflect the views of nonparticipants is uncertain. It is interesting to note that all schools who refused to participate did so due to timing of the administration of the survey rather than to the sensitive nature of the survey questions. This suggests that, had the survey been conducted earlier in the school year, there might have been a greater level of participation.

It should also be noted that caution is advised in comparing the 1990 and 1989 survey findings. Since the 1989 survey sample included only students from the seven educational service centers participating in the SHEPSHIV Project at that time, the findings from 1989 may not be representative of the entire state.

FINDINGS

The Sample Student Population

There were 1,181 eligible responses used to generate sample estimates (see Appendix B; Sample Control, School Nonresponse, and Eligible Respondents). The percentage of female respondents was 52. The median age of the sample was approximately 15.5 years old. More than three quarters (77%) of the sample indicated that their ethnicity was white, non-Hispanic origin. A profile of the eligible respondents is provided in Table 1.

Table 1. Demographic Summary of Respondents in the 1990 Illinois AIDS Survey

	Number (N=1,181)	Percent
Gender		
Female	619	52.4
Male	560	47.4
Unreported	2	.2
Age (in years)		
12 or younger	1	.1
13-14	387	32.8
15-16	789	66.8
17-18	4	.3
Ethnicity		
Black, non-Hispanic	157	13.3
White, non-Hispanic	911	77.1
Hispanic	40	3.4
American Indian/Alaskan Native	15	1.3
Asian/Pacific Islander	23	1.9
Other	30	2.5
Unreported	5	.4

The demographic characteristics of the sample are somewhat similar to those reported for the target population in the fall of 1989. The percentage of females in the ninth grade at that time was about 49 (ISBE, 1989a). The percentage of the population identified as white, non-Hispanic was about 65 (ISBE, 1988a). The differences in the gender proportions between the spring sample and the fall population may reflect the fact that more males than females drop out of high school. In 1989, for example, the statewide dropout rate for female ninth graders was 3.8 percent, while the dropout rate for males was 5.1 percent (ISBE, 1989b). Differences in ethnicity proportions (mainly whites and blacks) are likely due to sample underrepresentation from Chicago. The issue of gender and ethnicity representation is addressed in the section of Appendix B on Sample Weighting.

Disease Specific Knowledge

Most students are aware of the two major means of transmitting the AIDS virus: sharing needles or syringes (98.9%) and having sexual intercourse with an infected individual (97.8%). Also, they reject the myth that only gay men can get AIDS (97.1%) and realize that a person cannot get AIDS from shaking hands (96.6%).

Students are also knowledgeable about most means of preventing AIDS. They know, for example, that people can reduce their chances of becoming infected with the AIDS virus by being abstinent (83.0%), using condoms (90.1%), having sex with only one person (80.0%), and not having sex with intravenous drug users (79.2%).

There were, however, areas of confusion. A number of students said "yes" or were "not sure" if a person could reduce their risk by urinating after sexual intercourse (41.8%). Also, 29.8 percent of the students answered "no" or "not sure" when asked if they could get AIDS.

Furthermore, many students have a number of misconceptions about the disease and how its viral agent is transmitted. For example, there is a rather serious misconception concerning the transmission of the AIDS virus via the transfer of blood. Among the five most frequently missed questions, four were regarding the transfer of blood. Many students either said "yes" or were "not sure" that a person could get AIDS from giving blood, being bitten by a mosquito or having a blood test (64.8, 51.5 and 41.1%, respectively). Also, only 51.5 percent believe that blood transfusions are now generally safe. Table 2 lists the five questions answered correctly most and least often.

TABLE 2. Disease Specific Knowledge Questions Answered Correctly Most and Least Often (Top and Bottom 5, Correct Responses in Parentheses)

	Percent Correct
<u>Answered Correctly Most Often</u>	
Can a person get AIDS from sharing needles or syringes used to inject drugs?	98.9 (yes)
Can a person get AIDS from having sexual intercourse?	97.8 (yes)
Only gay men can get AIDS.	97.1 (false)
Any person infected with the AIDS virus can infect someone else during sexual intercourse.	96.8 (true)
Can a person get AIDS from shaking hands?	96.6 (no)
<u>Answered Correctly Least Often</u>	
Can a person get AIDS from having a blood test?	57.9 (no)
With regards to AIDS, blood transfusions are now generally safe.	51.5 (true)
Can a person get AIDS from being bitten by mosquitos or other insects?	48.6 (no)
Do you know what HIV is?	45.0 (yes)
Can a person get AIDS from giving blood?	35.2 (no)

Though Illinois ninth grade students know that you cannot get AIDS from shaking hands (96.6%), they are not as informed about other forms of casual contact. They were most often mistaken about kissing on the mouth. More than 41 percent answered "yes" or were "not sure" if a person can get the AIDS virus in this way. Also, nearly 28 percent and nearly 9 percent, respectively, answered "yes" or were "not sure" if a person could get the AIDS virus from using public toilets or going to school with a student who has AIDS.

With regard to overall disease specific knowledge, males and females tended to balance each other. Though females were more certain than males that a person could not get AIDS from giving blood (38.4% vs 31.6%), they were not so sure about blood tests and blood transfusions. More females than males (46.3% vs 37.5%) either agreed or were not sure if a person could get AIDS from a blood test. Also, more females than males (52.3% vs. 44.3%) either disagreed or were not sure if blood transfusions were generally safe.

Considering ethnicity, white students tended to be somewhat more knowledgeable than nonwhite students. By way of illustration, white students answered correctly more often for 25 out of 26 of the disease specific knowledge questions (see Appendix D). As examples of more extreme differences, 81.8% of white students, compared to 60.0% of nonwhite students, knew what acquired immunodeficiency syndrome is; and 88.6% of white students, compared to 65.8% of nonwhite students knew that people can reduce their chances of becoming infected with the AIDS virus by not having sexual intercourse (being abstinent). Also in the area of prevention, nearly 83 percent of white students, compared to 67 percent of nonwhite students, knew that people can reduce their risk of infection by not having sexual intercourse with an intravenous drug user. Particularly in the case of these two questions, it seems possible that a problem with understanding the questionnaire language exists for nonwhite students. Or, perhaps in general, the medical and scientific language involved in the discussion of AIDS is, for minority students, an impediment to the acquisition of AIDS knowledge.

Comparing regions of the state, the north, excluding Cook and collar counties, stands out as the region in which ninth graders are most knowledgeable. For 20 out of the 26 disease specific knowledge questions, the students in the north answered correctly more often than did the students in the other regions. For example, 54.6 percent of the students in the north, compared to 42.9 percent in the other regions, know what HIV is; and 87.9 percent versus 74.5 percent know what acquired immunodeficiency syndrome is. Also, 83.0 percent, compared to 70.3 percent, know that a person cannot get AIDS from public toilets; and 62.0 percent versus 49.3 percent acknowledge that blood transfusions are generally safe.

By contrast, students in Cook County are, in general, the least knowledgeable about AIDS. They answered correctly least often for 13 of the 26 disease specific questions. Compared to students in the rest of the state, they are particularly lacking in awareness of three important means of protection. Only 70.1 percent, compared to 85.6 percent, knew that people can reduce their chances of becoming infected with the AIDS virus by being abstinent. Similarly, they

were less aware of the risk reduction benefit of sex with only one partner and not having sex with intravenous drug users (69.1% vs. 82.0% and 68.7% vs. 80.9%, respectively).

Attitudes About AIDS

Responses to the three attitudinal questions were also analyzed by gender, ethnicity, and region. The results are described in Table 3.

Table 3. Percentage Distribution of Responses to the 1990 AIDS Survey Attitude Questions by Student Gender, Ethnicity, and Region of the State

	Yes	No	Not Sure
	%	%	%
Should students your age be taught about AIDS in school?			
Gender			
Male	92.5	3.4	4.1
Female	96.1	.8	3.1
Ethnicity			
Black, Non-Hispanic	98.7	1.3	0.0
White, Non-Hispanic	93.9	2.0	4.2
Hispanic	95.0	2.5	2.5
American Indian/Alaskan Native	93.3	0.0	6.7
Asian/Pacific Islander	91.3	4.3	4.3
Other	93.3	3.3	3.3
Region			
Cook County	98.2	1.8	0.0
Collar Counties	94.8	2.1	3.1
North	93.7	1.5	4.9
Central	91.8	2.5	5.7
South	94.5	2.2	3.3
TOTAL SAMPLE	94.4	2.0	3.6
Should a student with AIDS have the right to go to your school?			
Gender			
Male	74.8	10.5	14.6
Female	83.0	3.2	13.7
Ethnicity			
Black, Non-Hispanic	65.6	14.6	19.7
White, Non-Hispanic	82.0	5.4	12.6
Hispanic	75.0	2.5	22.5
American Indian/Alaskan Native	53.3	20.0	26.7
Asian/Pacific Islander	78.3	0.0	21.7
Other	76.7	10.0	13.3

	Yes	No	Not Sure
	%	%	%
Region			
Cook County	72.9	6.6	20.5
Collar Counties	85.6	5.5	8.9
North	83.0	5.3	11.7
Central	81.1	5.3	13.5
South	70.8	10.6	18.6
TOTAL SAMPLE	79.0	6.8	14.2
Would you be willing to go to class with a student with AIDS?			
Gender			
Male	65.4	13.3	21.3
Female	79.4	3.1	17.5
Ethnicity			
Black, Non-Hispanic	61.1	14.0	24.8
White, Non-Hispanic	75.2	6.7	18.1
Hispanic	67.5	7.5	25.0
American Indian/Alaskan Native	60.0	33.3	6.7
Asian/Pacific Islander	60.9	0.0	39.1
Other	83.3	6.7	10.0
Region			
Cook County	68.1	9.0	22.9
Collar Counties	77.1	5.9	17.0
North	77.2	7.3	15.5
Central	76.6	7.4	16.0
South	63.9	10.6	25.5
TOTAL SAMPLE	72.7	8.0	19.4

As a total group, the students were positive concerning ninth graders being taught about AIDS in school. More than 94 percent agreed that they should be.

They were not, however, very favorable about the presence in school of students with AIDS. Less than 80 percent (79.0%) of the students agreed that a student with AIDS has the right to go to their school. Even fewer students (72.7%) are willing to go to class with a student who has AIDS.

Attitudes towards AIDS education varied by demographic variables. The Asian/Pacific Islander ethnic group and students located in the central region of the state were least positive concerning AIDS education. Respectively, 91.3% and 91.8% of students in these groups agreed that students their age should be taught about AIDS in school. By contrast, students in the Black, non-Hispanic group (98.7%) and in Cook County (98.2%) agreed most often to AIDS education in school.

Concerning the presence of a student with AIDS in school, the demographic groups who least often agreed to the right of a student with AIDS to attend school were also the least willing to attend class with a student with AIDS. Males were less agreeable than females (74.8% to 83.0%) to the right to attend school and were also less willing than females (65.4% vs. 79.4%) to go to class with a student with AIDS. Among the ethnic groups, the American Indian/Alaskan Native group was both least agreeable to the right to attend (53.3%) and least willing to co-attend (60.0%). This group was, however, a very small portion of the sample and may not reflect the views of this ethnic group in general. Between regions, students in the south were least agreeable to rights (70.8%) and least willing to co-attend (63.9%).

General Health Information Questions

It is critical that students know where to get correct information about AIDS and where to get tested for the AIDS virus. Table 4 reports the extent of their knowledge in these areas.

TABLE 4. Percentage Distribution of Responses to the 1990 Illinois AIDS Survey General Health Information Questions by Student Gender, Ethnicity, and Region of the State

	Yes	No	Not Sure
	%	%	%
Do you know where to get correct information about AIDS?			
Gender			
Male	63.2	18.2	18.6
Female	61.9	16.8	21.3
Ethnicity			
Black, Non-Hispanic	65.6	15.9	18.5
White, Non-Hispanic	63.3	17.2	19.4
Hispanic	47.5	30.0	22.5
American Indian/Alaskan Native	60.0	13.3	26.7
Asian, Pacific Islander	60.9	8.7	30.4
Other	43.3	23.3	33.3
Region			
Cook County	52.4	18.1	29.5
Collar Counties	65.6	16.2	18.2
North	64.1	16.0	19.9
Central	64.8	17.2	18.0
South	62.0	19.7	18.2
TOTAL SAMPLE	62.5	17.4	20.1

	Yes	No	Not Sure
	%	%	%
Do you know where to get tested for the AIDS virus?			
Gender			
Male	49.3	32.3	18.4
Female	50.6	29.6	19.9
Ethnicity			
Black, Non-Hispanic	59.2	23.6	17.2
White, Non-Hispanic	49.4	31.4	19.2
Hispanic	35.0	47.5	17.5
American Indian/Alaskan Native	60.0	33.3	6.7
Asian, Pacific Islander	43.5	26.1	30.4
Other	33.3	36.7	30.0
Region			
Cook County	46.4	28.9	24.7
Collar Counties	46.4	30.6	23.0
North	52.9	30.1	17.0
Central	49.2	32.8	18.0
South	54.4	31.4	14.2
TOTAL SAMPLE	50.0	30.9	19.1

Many of the students do not know where to get correct information about AIDS or where to get tested for AIDS. Among the total sample, nearly 38 percent reported that they either did not know or were not sure where to get correct information about AIDS. Also, fully 50 percent did not know or were not sure where to get tested for AIDS.

Among the ethnic groups, the Hispanic and "other" (e.g., multiracial) groups were least knowledgeable about where to get information (47.5% and 43.3%, respectively) and were also least knowledgeable about where to get tested (35.0% and 33.3%, respectively). In comparison, the black, non-Hispanic group was most knowledgeable about where to get information (65.6%), and the American Indian group was most knowledgeable about where to get tested (60.0%). Black students were also relatively knowledgeable about where to get tested (59.2%).

Regional differences were also found. Only 52.4 percent of the students in Cook County, contrasted with 64.1 percent in the rest of the state, reported knowing where to get correct information about AIDS. Also, only 46.4 percent of the students in Cook and the collar counties, compared with 52.2 percent in the remaining regions, responded "yes" they know where to get tested for AIDS.

Comparison of Illinois Ninth Graders (1990) with Adults Surveyed Nationally (1989)

For questions allowing direct comparison, Illinois ninth grader responses were compared with the adult responses to the 1989 National Health Interview Survey. Results are described in Table 5.

TABLE 5. Comparisons between the 1990 AIDS Survey of Ninth Graders (Illinois) and the 1989 AIDS Survey of Adults (National)

Adults (National)		9th Graders (Illinois)	
Question	%*	Question	%**
Teenagers cannot get AIDS.		Do you think you can get AIDS?	
Definitely true	1	Yes	70
Probably true	0	No	14
Probably false	3	Not sure	16
Definitely false	94		
Don't know	2		
Looking at a person is enough to tell if he or she has the AIDS virus?		You can tell if a person is infected with the AIDS virus by looking at the person.	
Definitely true	3	True	4
Probably true	4	False	84
Probably false	13	Not sure	12
Definitely false	71		
Don't know	9		
Any person with the AIDS virus can pass it on to someone else during sexual intercourse.		Any person infected with the AIDS virus can infect someone else during sexual intercourse.	
Definitely true	83	True	97
Probably true	11	False	1
Probably false	1	Not sure	2
Definitely false	1		
Don't know	4		
A pregnant woman who has the AIDS virus can give the AIDS virus to the baby		A pregnant woman who has the AIDS virus can infect her unborn baby with the virus.	
Definitely true	82	True	91
Probably true	13	False	1
Probably false	0	Not sure	8
Definitely false	1		
Don't know	4		

Adults (National)		9th Graders (Illinois)	
Question	%*	Question	%**
There is no cure for AIDS at present.		There is a cure for AIDS.	
Definitely true	85	True	2
Probably true	7	False	89
Probably false	1	Not sure	8
Definitely false	2		
Don't know	4		
How likely do you think it is that a person will get AIDS or the AIDS virus infection from -		**Can a person get AIDS from the following:**	
Kissing - with exchange of saliva-a person who has the AIDS virus?		Kissing on the mouth?	
Very likely	25	Yes	18
Somewhat likely	29	No	59
Somewhat unlikely	12	Not sure	24
Very unlikely	16		
Definitely not possible	8		
Don't know	10		
Shaking hands, touching or kissing on the cheek someone who has the AIDS virus?		Shaking hands with someone who has AIDS?	
Very likely	2	Yes	2
Somewhat likely	6	No	97
Somewhat unlikely	12	Not sure	1
Very unlikely	39		
Definitely not possible	35		
Don't know	6		
Using public toilets?		Using public toilets?	
Very likely	6	Yes	7
Somewhat likely	12	No	72
Somewhat unlikely	12	Not sure	21
Very unlikely	34		
Definitely not possible	27		
Don't know	9		

Adults (National)		9th Graders (Illinois)	
Question	%*	Question	%**
Sharing needles for drug use with someone who has the AIDS virus?		Sharing needles or syringes used to inject drugs?	
Very likely	95	Yes	99
Somewhat likely	2	No	1
Somewhat unlikely	0	Not sure	0
Very unlikely	0		
Definitely not possible	0		
Don't know	2		
Attending school with a child who has the AIDS virus?		Going to school with a student who has AIDS?	
Very likely	2	Yes	3
Somewhat likely	5	No	91
Somewhat unlikely	10	Not Sure	6
Very unlikely	42		
Definitely not possible	35		
Don't know	7		
Mosquitos or other insects?		Being bitten by mosquitos or other insects?	
Very likely	10	Yes	23
Somewhat likely	17	No	49
Somewhat unlikely	9	Not Sure	28
Very unlikely	24		
Definitely not possible	20		
Don't know	21		
Do you think the present supply of blood is safe for transfusions?		With regard to AIDS, blood transfusions are now generally safe?	
Yes	49	True	52
No	27	False	19
Other	0	Not Sure	29
Don't know	24		

Adults (National)		9th Graders (Illinois)	
Question	%*	Question	%**
Here are some methods people use to prevent getting the AIDS virus through sexual activity. How effective is -		**Can people reduce their chances of becoming infected with AIDS virus by:**	
Using a condom?		Using condoms during sexual intercourse?	
Very effective	33	Yes	90
Somewhat effective	53	No	4
Not at all effective	5	Not Sure	6
Don't know how effective	7		
Don't know method	2		
Two people who do not have the AIDS virus having sex only with each other?		Having sexual intercourse only with one person not infected with the AIDS virus?	
Very effective	85	Yes	80
Somewhat effective	7	No	9
Not at all effective	2	Not sure	11
Don't know how effective	4		
Don't know method	1		

* For the national data, "-" equals the quantity zero and "0" equals a quantity more than zero but less than 0.05.

** For the Illinois data, "0" equals a quantity of zero or less than 0.05.

In general, the knowledge and attitudes about AIDS held by Illinois ninth graders reflect the knowledge and attitudes of the adults surveyed nationally. For example, to the statement that any person infected with the AIDS virus can infect someone else during sexual intercourse, 94 percent of the adults responded "true" or "probably true", and 97 percent of the ninth graders responded "true." Also, 97 percent of the adults said it was "very likely" or "somewhat likely" that a person will get AIDS or the AIDS virus infection from sharing needles with someone who has the AIDS virus, and 99 percent of the ninth graders said "yes" a person can get AIDS in this way.

Misconceptions are also shared. Among the adults, 27 percent felt it was "somewhat likely" or "very likely" that a person could get AIDS from mosquito bites, and 23 percent of the ninth graders shared this belief. Also, only 49 percent of the adults and 52 percent of the ninth graders were in agreement with the general safety of blood transfusions. Moreover, 14 percent of the adults felt it was at least "somewhat likely" or they didn't know if a person can get AIDS from going to school with a child who has the AIDS virus, and this misconception is reflected by 9 percent of the Illinois ninth graders.

There are, however, some areas of disagreement between the adults and the ninth graders. For instance, while 97 percent of the adults felt it was "probably" or "definitely false" that teenagers cannot get AIDS, only 70 percent of the ninth graders said "yes" they could get AIDS. On the other hand, the ninth graders were more astute about transmission of the AIDS virus through casual contact. Though only 36 percent of the adults felt it was at least "somewhat unlikely" that a person could get AIDS from "kissing-with exchange of saliva-a person who has the AIDS virus," nearly 60 percent of the ninth graders realized that a person could not get AIDS from kissing on the mouth. Also, 97 percent of the ninth graders realized that a person cannot get AIDS from shaking hands, while only 86 percent of the adults felt it was at least "somewhat unlikely" that a person will get AIDS from "shaking hands, touching, or kissing on the check."

Comparison of the Illinois 1990 and the Illinois 1989 AIDS Survey of Ninth Graders

Overall, the level of disease specific knowledge about AIDS was very similar for the 1989 and 1990 surveys. Even the misconceptions about the transmission of the AIDS virus through blood transfer (e.g., blood test, giving blood, etc.) were equally present during these two years. There were, however, several areas of improvement deserving attention. For instance, there was nearly a 15 percent increase in the number of students who knew what HIV is (30.2% in 1989 and 45.0% in 1990). Also, there was a marked improvement in attitudes. In 1989, only 68.8 percent of the students believed that a student with AIDS should have the right to go to their school, and only 63.8 percent of them were willing to go to class with a student with AIDS. In 1990, however, 79.0 percent believed in the right to attend, and 72.7 percent of them were willing to co-attend. Finally, there was some increase in knowledge of where to get tested for AIDS. In 1989, 42.7 percent knew where to get tested; and, in 1990, 50.0 percent knew where to get tested.

CONCLUSIONS AND RECOMMENDATIONS

It is encouraging to note that ninth graders are aware of the major means of transmitting the AIDS virus: sexual intercourse and the sharing of hypodermic syringes. It is also good news to learn that they are reasonably knowledgeable about the important prevention measures: abstinence, sex with one partner, the avoidance of sex with intravenous drug users, and the use of condoms.

It is discouraging, however, to learn of a number of misconceptions about AIDS held by the surveyed ninth graders. Of particular concern is the misunderstanding about the transmission of the AIDS virus through the transfer of blood (e.g., giving blood, blood tests, etc.). For obvious health reasons, it is important that students not be fearful of blood tests, blood transfusions, or the donation of blood. Once, however, educators are made aware of this misunderstanding, it should be a relatively simple matter **to stress and clarify, within the AIDS education curriculum, the correct information concerning the transfer of blood.**

It is also disturbing to realize that many ninth graders are phobic about going to school with a student who has AIDS. This attitude can lead to discriminatory behavior resulting in either the exclusion of students with AIDS from educational opportunity or a very emotionally painful educational experience. As demonstrated by the comparison of the 1990 Illinois ninth grader survey and the 1989 national adult survey, ninth graders and adults share a number of misconceptions about AIDS. It seems likely that the attitudes of youngsters are strongly influenced by adults. **Before attitudes of ninth graders can be improved, it is important to first educate the adults whose attitudes are instilled in the minds of the children. These adults must include educators as well as parents, relatives, and friends.** At least, it is heartening to note that some improvement may be occurring, as shown in the comparison between the 1989 and 1990 Illinois surveys.

Perhaps Illinois educators should be most alarmed by the fact that so many ninth graders report that they do not know where to get correct information about AIDS. After all, is it not the **role of educators to either provide reliable information themselves or to inform students of alternative sources of reliable and readily available information?**

It would also behoove Illinois educators to more closely **examine the inequities in AIDS knowledge based on student ethnicity and region of the state.** If the medical and scientific terminology involved in the discussion of AIDS is a problem for minority students, then efforts should be made to adjust instruction in a fashion which will be more readily understood by these students.

Also, closer scrutiny, yet beyond the scope of this study, is needed to determine why students in the northern part of the state (excluding Cook and collar counties) appear to be more knowledgeable about AIDS. Is it that educators in that region are doing a better job with AIDS education, or are, perhaps, these students receiving greater media exposure to AIDS information? If closer study reveals that AIDS education is, indeed, more effective in this region, then the educational methods employed therein can be modeled by educators across the rest of the State.

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APPENDIX A

Illinois AIDS Survey Questionnaire
(ISBE 86-52),
Survey Instructions, and
Sample Parental Consent Form

AIDS SURVEY

AIDS is a very serious health problem in our nation. Health officials are trying to find the best ways to teach people about AIDS. This survey has been developed so you can tell us what you know about AIDS. The information you give will be used to develop better AIDS education programs for young people like yourself.

DO NOT write your name on this survey. The answers you give will be kept **private**. No one will know what you write. Answer the questions based on what you really know or feel. **No names will ever be reported.**

Completing the survey is voluntary. Whether or not you answer the questions will not affect your grade in this class.

Check one answer for each question. Make sure to answer every question. Thank you for your help.

1. Do you know what Acquired Immunodeficiency Syndrome is?
   - ☐ Yes
   - ☐ No
   - ☐ Not Sure

2. Do you know what HIV is?
   - ☐ Yes
   - ☐ No
   - ☐ Not Sure

3. Should students your age be taught about AIDS in school?
   - ☐ Yes
   - ☐ No
   - ☐ Not Sure

4. Should a student with AIDS have the right to go to your school?
   - ☐ Yes
   - ☐ No
   - ☐ Not Sure

5. Would you be willing to go to class with a student with AIDS?
   - ☐ Yes
   - ☐ No
   - ☐ Not Sure

6. Do you think you can get AIDS?
   - ☐ Yes
   - ☐ No
   - ☐ Not Sure

7. Can you keep from getting AIDS?
   - ☐ Yes
   - ☐ No
   - ☐ Not Sure

8. Do you know where to get correct information about AIDS?
   - ☐ Yes
   - ☐ No
   - ☐ Not Sure

9. Do you know where to get tested for the AIDS virus?
   - ☐ Yes
   - ☐ No
   - ☐ Not Sure

Can a person get AIDS from the following:

10. Shaking hands with someone who has AIDS?
    - ☐ Yes
    - ☐ No
    - ☐ Not Sure

11. Giving blood?
    - ☐ Yes
    - ☐ No
    - ☐ Not Sure

12. Going to school with a student who has AIDS?
    - ☐ Yes
    - ☐ No
    - ☐ Not Sure

13. Kissing on the mouth?
    - ☐ Yes
    - ☐ No
    - ☐ Not Sure

14. Being bitten by mosquitos or other insects?
    - ☐ Yes
    - ☐ No
    - ☐ Not Sure

15. Sharing needles or syringes used to inject drugs?
    - ☐ Yes
    - ☐ No
    - ☐ Not Sure

16. Using public toilets?
    - ☐ Yes
    - ☐ No
    - ☐ Not Sure

17. Having sexual intercourse?
    - ☐ Yes
    - ☐ No
    - ☐ Not Sure

18. Having a blood test?
    - ☐ Yes
    - ☐ No
    - ☐ Not Sure

ISBE 86-52 (11/88)

Decide whether these statements are true or false.

19. You can protect yourself from becoming infected with the AIDS virus.
- ☐ True
- ☐ False
- ☐ Not Sure

20. You can tell if a person is infected with the AIDS virus by looking at the person.
- ☐ True
- ☐ False
- ☐ Not Sure

21. Any person infected with the AIDS virus can infect someone else during sexual intercourse.
- ☐ True
- ☐ False
- ☐ Not Sure

22. A pregnant woman who has the AIDS virus can infect her unborn baby with the virus.
- ☐ True
- ☐ False
- ☐ Not Sure

23. There is a cure for AIDS.
- ☐ True
- ☐ False
- ☐ Not Sure

24. Only gay men can get AIDS.
- ☐ True
- ☐ False
- ☐ Not Sure

25. With regard to AIDS, blood transfusions are now generally safe.
- ☐ True
- ☐ False
- ☐ Not Sure

Can people reduce their chances of becoming infected with the AIDS virus by:

26. Not having sexual intercourse (being abstinent)?
- ☐ Yes
- ☐ No
- ☐ Not Sure

Can people reduce their chances of becoming infected with the AIDS virus by:

27. Using condoms during sexual intercourse?
- ☐ Yes
- ☐ No
- ☐ Not Sure

28. Urinating after sexual intercourse?
- ☐ Yes
- ☐ No
- ☐ Not Sure

29. Having sexual intercourse only with one person not infected with the AIDS virus?
- ☐ Yes
- ☐ No
- ☐ Not Sure

30. Not having sexual intercourse with a person who uses illegal drugs that can be injected?
- ☐ Yes
- ☐ No
- ☐ Not Sure

31. Taking birth control pills?
- ☐ Yes
- ☐ No
- ☐ Not Sure

32. What grade are you in?
- ☐ a. 8th
- ☐ b. 9th
- ☐ c. 10th
- ☐ d. 11th
- ☐ e. 12th

33. What is your sex?
- ☐ a. Female
- ☐ b. Male

34. How old are you?
- ☐ a. 12 years old or younger
- ☐ b. 13-14 years old
- ☐ c. 15-16 years old
- ☐ d. 17-18 years old
- ☐ e. 19 years old or older

35. What is your ethnic group?
- ☐ a. Black, not of Hispanic origin
- ☐ b. White, not of Hispanic origin
- ☐ c. Hispanic
- ☐ d. American Indian or Alaskan native
- ☐ e. Asian or Pacific Islander
- ☐ f. Other _____

THE END

Thank you for your help. Please return this survey to your teacher.

ADMINISTRATION OF THE AIDS SURVEY

Collection of valid and reliable data is dependent upon careful administration of the survey. Students must be provided with a safe environment conducive to providing sincere and honest responses. The survey administrator can greatly enhance students' perceptions of privacy and comfort and the collection of credible data by attending to the following:

1. Spread students throughout the classroom so they cannot see other students' responses.

2. Provide students with an extra sheet of paper to cover their answer sheets as they work.

3. Do not allow students to wander around the room while others are completing the survey unless they are placing their survey in the manila envelope provided.

4. Once the surveys are distributed read the survey instructions to the students.

5. Encourage students to complete every question.

6. Remind students to check one response for each question. Erasures should be made carefully and completely.

7. Do not answer questions concerning the meaning of items or words within items. This is vital to the survey's validity and reliability.

8. Allow enough time for every student to complete the survey without feeling rushed. (Survey will take approximately 30 minutes.)

9. Instruct students to place their survey in the manila envelope.

10. Seal all completed answer surveys in the manila envelope in front of the students so they are assured confidentiality.

11. Return the completed surveys to the Illinois State Board of Education.

Thank you.

RE\BS30

Dear Parent(s):

Our school is participating in an AIDS survey in cooperation with the Illinois State Board of Education and the Centers for Disease Control. The survey will gather information about HIV-related knowledge and beliefs among 9th grade students. HIV is the virus that causes AIDS. Each student who completes the survey will have the satisfaction of knowing that she or he has played an important role in the survey. The information collected will help educators and public officials working at national, State, and local levels improve HIV prevention education and school health education programs.

Your child's class was randomly selected to take the survey. It will take about 30 minutes to complete during your child's regular class period. Completing the paper and pencil survey poses no risk to your child. The survey will ask only about HIV-related knowledge and beliefs. Survey procedures have been designed to protect your child's privacy and allow for anonymous participation. No names or other identifiers will be recorded on the answer sheets. No school or student will ever be mentioned by name in a report of the results.

Valid results depend on high participation rates among the selected classes. However, the decision to participate is voluntary. There will be no repercussions against the school, you, or your child if your child does not participate. Another activity will be planned for children who do not take the survey.

Please read the form below. Circle your response and return the form to school within three days. If you have any questions, please contact either Dr. Fred Dawson or Joyce Flood, of the Illinois State Board of Education, at (217)782-3950.

Thank you for your time and consideration.

My child, _____ (Circle one) may/may not complete the AIDS survey.

_____ _____

Date Parent's Signature

APPENDIX B

Survey Methodology and Response Rate

Sample Size and Design

The desired sample size was determined by assuming an average sampling error of three percent and applying Cochran's (1977) sample size formula needed for proportion estimates. The sample size for these conditions was about 300. Based on the design effect calculated from the 1989 survey data, the multi-stage design used in the AIDS survey would be about 40 percent as efficient as a simple random sample. These considerations resulted in a desired sample size of 750 for the Illinois AIDS survey. Considering the sensitive nature of the questions and the fact that administration would occur in the spring when extensive testing takes place, ISBE staff expected only 50% of the schools contacted to agree to participate in the study. An 80% response rate from those schools which agreed to participate was expected if adequate followup procedures were utilized during the data collection phase of the survey. Using the inverse of these proportions as inflation factors, an initial sample of 2,000 students would be needed to yield an expected sample of 750 eligible responses. The sample design included drawing two ninth grade English classes per school. By assuming there would be 25 ninth graders per class (50 per school), a total of 40 schools would be needed to obtain a student count of 2,000.

Administratively, sampling was carried out in several stages, including selection of districts, schools within districts and classrooms within schools. In general, districts had only one school housing ninth graders. Chicago, however, was an exception because it had 68 schools housing ninth graders. Therefore, a decision was made to select one school per district, with the exception of Chicago, from which four schools were selected. The number of schools selected from Chicago seemed reasonable given that 5.9% of the Chicago schools housing ninth graders, compared to 6.4% of the downstate schools housing ninth graders, were selected. Since, however, the schools in Chicago are relatively large, the sampling of four schools from Chicago may have resulted in some underrepresentation. It was felt that, if necessary, this underrepresentation could be adjusted for by weighting of cases for the statistical analysis.

It was desirable that the sample design yield a self-weighting sample to simplify estimate calculations. That is, each student in the sampling population would have an equal chance of being selected for the sample. To accomplish this, a four-stage random sample was used. The first stage was the selection of the 40 districts, the second stage was the selection of the 43 schools, and the third stage was the selection of two English classrooms from each school. Selection at the fourth stage, the student level, was certain if a student attended class during the administration of the survey. Districts and schools were sampled with probability proportionate to size, guaranteeing (with exception in Chicago) self-weighting and an equal chance of sample inclusion for every student in the targeted population.

The classrooms were randomly selected without consideration to size.

Response Rate

ISBE staff first contacted all district superintendents from the 40 selected districts and asked whether their districts would participate in the survey. From these 40 districts, 34 superintendents (85%) agreed that their districts would participate. Next, school principals were contacted. From the 34 districts agreeing to participate, 34 school principals out of a possible 37 (there were 4 schools from Chicago) agreed to participate (92%).

Once agreement for district and school participation was obtained, ISBE staff conducted a telephone interview with a designated school representative (principal, head of the English department, school nurse, etc.) to obtain a listing of English classes and an up-to-date total number of ninth graders. The English class listing was used to randomly select the two classrooms per school for participation in the survey.

The participating classes enrolled a total of 1,629 students. A total of 1,240 students responded to the survey. Eliminating the students who reported on their returned surveys that they were not in the ninth grade, there were 1,181 eligible student responses for a student level response rate of 72%.

A contributing factor to nonresponse at the student level may have been lack of parental consent. The initial contact letters to principals included instructions to obtain parental consent prior to survey administration. A sample of an active (response required) parental consent letter was enclosed for their use (see Appendix A). The degree to which consent was not obtained is not known.

Though it was anticipated that some schools would not agree to participate due to the sensitive nature of the survey questions, no district superintendent or school principal contacted mentioned sensitivity as a factor in their decision not to participate. Instead, all of the administrators contacted gave one of two reasons for nonparticipation: either the time of year and the amount of testing in progress or the objection to using English classes which they felt were over-tested and over-surveyed in general.

Another form of survey nonresponse is item nonresponse. This situation occurs when respondents fail to complete all items on the questionnaire. Of the 1,181 eligible responses, 33 students failed to complete every questionnaire item. Two respondents failed to indicate their gender, while five respondents failed to indicate their ethnicity. Eighteen out of 31 survey items measuring knowledge or attitudes lacked responses from one or more students. Eight items were missing one response, four items were missing two responses, and five items were missing three responses. The item asking if people can reduce their chances of

becoming infected with the AIDS virus by not having sexual intercourse (being abstinent) was exceptional. Thirty-three students failed to respond to this item. Failure to respond may have been due to the sensitive nature of the item, or it may have been due to unfamiliarity with the word "abstinent".

Sample Control and School Noncompliance

Survey kits were mailed to each teacher of the 67 participating classrooms (one school had only one English class). This kit included instructions on how to distribute the AIDS questionnaires to classrooms, instructions on how to administer the questionnaires, and one postage-paid return envelope containing 40 questionnaires. A sample of the elements in the survey kit is provided in Appendix A.

The teacher's instructions for questionnaire administration were quite general. They stressed the need to maintain a nondistracting environment, to encourage complete responses by the students, and to return both completed and unused forms to the questionnaire envelopes. The envelopes were used to designate the separate classroom responses and to assure complete retrieval of all forms used in the survey.

Four teachers administered the surveys to additional sections of ninth grade English students ranging from 10 to 24 students. In these cases, the additional surveys and the surveys from the originally specified classroom were combined and treated in the analysis as responses from one classroom. Also, in one instance, a teacher inadvertently combined both of the selected classrooms in one envelope. In this case, the top 25 (the previously reported number) were assigned to one classroom, and the remaining 15 were assigned to the second classroom.

Though every effort was made to obtain from each school a list of ninth grade English classes to be used for random selection of classrooms, one school wished to select their participating classrooms at their own discretion. Permission was granted in order to assure participation from that school. The degree to which this deviation from the random selection process biased results is not known.

Sample Weighting

Weighting of survey responses is necessary when disproportional sampling occurs either by design, as in stratified sampling, or as a result of survey response. If the sample is proportional, then estimates from sample means or proportions need not be weighted. With the exception of Chicago, the AIDS survey was designed to be self-weighting so that the addition of sampling weights should not be needed. To test this assumption, the actual probabilities of selection were calculated for each school district and were compared to the theorized probabilities. Because the theorized and actual probabilities were relatively close, a decision was made to forgo sample weighting based on the probability of student selection.

Another form of bias which may affect the likelihood of student selection is nonresponse or sampling bias with regard to demographic composition. To reduce this possible bias, sample weights were calculated by a poststratification adjustment method. The Illinois population proportions (ISBE, 1989a) of ninth grade males and females within each ethnic category were divided by their respective sample proportions to arrive at the expansion factors (weights) for each gender within ethnicity category. The appropriate weights were applied to each case in the sample, and comparisons were made between the unweighted and weighted sample proportions. The weighting resulted in an average difference of 2.37 percentage points between unweighted and weighted sample proportions, a difference which was regarded as minor. Given the minor difference in weighted and unweighted sample proportions, the decision was made to report findings based on unweighted data and to calculate the design effect due to multi-stage sampling based on the unweighted sample. All proportions reported in the Findings Section of this report are based on unweighted cases.

Design Effect

When a sample is multi-stage rather than simple random, a clustering effect of responses may occur. This is due to the fact that the sample cases are not totally independent. For example, student responses within a classroom may be somewhat related due to similar educational experiences resulting from a shared classroom, school, or school district. To adjust for this clustering effect, a "design-effect" must be calculated. For this survey, the design effect was calculated using a method called Balanced Repeated Replication (BRR) (Sudman, 1976). The resulting design effect (DEFF) was 2.16. Based on the average standard errors of sample estimates adjusted for the DEFF, reported sample proportions may reflect sampling error by 2.7 percentage points in either direction.

APPENDIX C

Classification of Illinois Counties into State Geographic Regions

Classification of Illinois Counties into Geographic Regions

Region 1 - Cook County

Region 2 - Collar Counties (surrounding Cook County)

DuPage
Kane
Kendall
Lake
McHenry
Will

Region 3 - North (excluding Cook and collar counties)

Boone
Carroll
DeKalb
Henry
Jo Daviess
LaSalle
Lee
Marshall
Mercer
Ogle
Putnam
Rock Island
Stark
Stephenson
Whiteside
Winnebago
Bureau
Grundy
Kankakee

Region 4 - Central

Adams
Brown
Cass
Christian
Fulton
Hancock
Henderson
Knox
Logan
Mason
Champaign
Clark
Coles
Cumberland
DeWitt
Douglas
Edgar
Ford
Iroquois
McDonough
Menard
Morgan
Peoria
Pike
Sangamon
Schuyler
Scott
Tazewell
Warren
Livingston
Morgan
McLean
Moultrie
Piatt
Shelby
Vermilion
Woodford

Region 5 - South

Bond
Calhoun
Clinton
Greene
Jersey
Macoupin
Madison
Monroe
Montgomery
Perry
Randolph
St. Clair
Washington
Alexander
Clay
Crawford
Edwards
Fayette
Franklin
Gallatin
Hamilton
Hardin
Jackson
Jasper
Jefferson
Johnson
Lawrence
Marion
Mason
Pope
Pulaski
Richland
Saline
Union
Wabash
Wayne
Williamson

APPENDIX D

Summary of Questionnaire Item Responses

SUMMARY OF QUESTIONNAIRE ITEM RESPONSE BY STUDENT GENDER AND ETHNICITY

Question	Ethnicity	Gender	N	Yes	No	Not Sure
				%	%	%
1. Do you know what Acquired Immuno-deficiency Syndrome is?	White	Female	481	81.3	9.6	9.1
		Male	428	82.7	10.5	7.2
	Nonwhite	Female	135	58.5	23.7	17.8
		Male	129	61.2	24.8	14.0
2. Do you know what HIV is?	White	Female	479	45.5	28.4	26.1
		Male	429	46.9	33.1	20.0
	Nonwhite	Female	135	41.5	40.7	17.8
		Male	129	38.8	38.0	23.3
3. Should students your age be taught about AIDS in school?	White	Female	481	95.8	.6	3.5
		Male	429	91.6	3.5	4.9
	Nonwhite	Female	135	97.8	.7	1.5
		Male	127	95.3	3.1	1.6
4. Should a student with AIDS have the right to go to your school?	White	Female	481	86.3	2.3	11.4
		Male	429	77.4	8.9	13.8
	Nonwhite	Female	135	71.1	6.7	22.2
		Male	129	66.7	15.5	17.8
5. Would you be willing to go to class with a student with AIDS?	White	Female	480	82.1	2.5	15.4
		Male	427	67.7	11.5	20.8
	Nonwhite	Female	135	70.4	5.2	24.4
		Male	129	58.9	18.6	22.5
6. Do you think you can get AIDS?	White	Female	481	72.8	10.0	17.3
		Male	428	68.7	16.1	15.2
	Nonwhite	Female	134	64.2	14.2	21.6
		Male	129	69.8	20.2	10.1
7. Can you keep from getting AIDS?	White	Female	481	90.2	3.1	6.7
		Male	429	92.8	1.6	5.6
	Nonwhite	Female	135	81.5	5.2	13.3
		Male	129	88.4	3.1	8.5

Question	Ethnicity	Gender	N	Yes	No	Not Sure
				%	%	%
8. Do you know where to get correct information about AIDS?	White	Female	481	61.7	17.0	21.2
		Male	429	65.0	17.5	17.5
	Nonwhite	Female	135	62.2	16.3	21.5
		Male	129	57.4	20.2	22.5
9. Do you know where to get tested for the AIDS virus?	White	Female	481	50.7	29.3	20.0
		Male	429	48.0	33.6	18.4
	Nonwhite	Female	135	48.9	31.1	20.0
		Male	129	53.5	27.9	18.6
10. Can a person get AIDS from the following: shaking hands with someone who has AIDS?	White	Female	481	.6	98.3	1.0
		Male	429	2.8	95.8	1.4
	Nonwhite	Female	135	2.2	95.6	2.2
		Male	129	3.1	94.6	2.3
11. Can a person get AIDS from the following: giving blood?	White	Female	481	47.0	41.8	11.2
		Male	429	59.4	35.0	5.6
	Nonwhite	Female	135	58.5	27.4	14.1
		Male	129	72.9	20.2	7.0
12. Can a person get AIDS from the following: going to school with a student who has AIDS?	White	Female	481	.6	94.6	4.8
		Male	429	3.3	91.1	5.6
	Nonwhite	Female	135	3.7	89.6	6.7
		Male	129	3.9	81.4	14.7
13. Can a person get AIDS from the following: kissing on the mouth?	White	Female	479	15.0	64.7	20.3
		Male	428	19.2	56.5	24.3
	Nonwhite	Female	135	12.6	54.8	32.6
		Male	129	27.1	47.3	25.6
14. Can a person get AIDS from the following: being bitten by mosquitoes or other insects?	White	Female	480	19.6	50.6	29.8
		Male	429	23.1	51.7	25.2
	Nonwhite	Female	135	23.7	42.2	34.1
		Male	129	38.0	36.4	25.6
15. Can a person get AIDS from the following: sharing needles or syringes to inject drugs?	White	Female	481	99.2	.4	.4
		Male	429	98.8	.7	.5
	Nonwhite	Female	135	98.5	1.5	.0
		Male	129	98.4	.8	.8
16. Can a person get AIDS from the following: using public toilets?	White	Female	481	3.5	77.8	18.7
		Male	429	7.2	71.8	21.0
	Nonwhite	Female	135	5.2	69.6	25.2
		Male	128	16.4	59.4	24.2

Question	Ethnicity	Gender	N	Yes	No	Not Sure
				%	%	%
17. Can a person get AIDS from the following: having sexual intercourse?	White	Female	481	98.3	.6	1.0
		Male	429	98.8	.7	.5
	Nonwhite	Female	135	96.3	.7	3.0
		Male	129	94.6	1.6	3.9
18. Can a person get AIDS from the following: having a blood test?	White	Female	480	19.8	56.6	23.8
		Male	429	19.8	65.5	14.7
	Nonwhite	Female	135	15.6	45.2	39.3
		Male	129	23.3	52.7	24.0
19. You can protect yourself from becoming infected with the AIDS virus.	White	Female	481	92.3	2.5	5.2
		Male	429	94.2	2.1	3.7
	Nonwhite	Female	135	86.7	2.2	11.1
		Male	129	92.2	3.1	4.7
20. You can tell if a person is infected with the AIDS virus by looking at the person.	White	Female	480	2.1	87.9	10.0
		Male	429	4.4	82.8	12.8
	Nonwhite	Female	135	3.7	80.0	16.3
		Male	129	6.2	78.3	15.5
21. Any person infected with the AIDS virus can infect someone else during sexual intercourse.	White	Female	481	97.7	.6	1.7
		Male	428	96.3	1.9	1.9
	Nonwhite	Female	135	97.8	.0	2.2
		Male	129	93.8	3.1	3.1
22. A pregnant woman who has the AIDS virus can infect her unborn baby with the virus.	White	Female	481	92.7	.6	6.7
		Male	429	89.0	1.2	9.8
	Nonwhite	Female	135	92.6	.0	7.4
		Male	129	92.2	2.3	5.4
23. There is a cure for AIDS.	White	Female	481	1.2	93.3	5.4
		Male	429	2.8	89.5	7.7
	Nonwhite	Female	135	3.7	80.7	15.6
		Male	129	3.9	82.2	14.0
24. Only gay men can get AIDS.	White	Female	481	.6	97.7	1.7
		Male	429	2.1	97.2	.7
	Nonwhite	Female	134	.0	98.5	1.5
		Male	129	3.9	94.6	1.6
25. With regard to AIDS, blood transfusions are now generally safe.	White	Female	480	53.8	16.3	30.0
		Male	427	60.4	18.0	21.5
	Nonwhite	Female	135	26.7	27.4	45.9
		Male	129	41.1	25.6	33.3

Question	Ethnicity	Gender	N	Yes	No	Not Sure
				%	%	%
26. Can people reduce their chances of becoming infected with the AIDS virus by not having sexual intercourse (being abstinent)?	White	Female	466	89.3	4.1	6.7
		Male	419	87.8	7.9	4.3
	Nonwhite	Female	131	63.4	15.3	21.4
		Male	125	68.0	15.2	16.8
27. Can people reduce their chances of becoming infected with the AIDS virus by using condoms during sexual intercourse?	White	Female	481	90.4	2.3	7.3
		Male	429	96.0	1.9	2.1
	Nonwhite	Female	135	82.2	8.1	9.6
		Male	129	78.3	8.5	13.2
28. Can people reduce their chances of becoming infected with the AIDS virus by urinating after sexual intercourse?	White	Female	481	5.0	64.2	30.8
		Male	429	6.8	57.1	36.1
	Nonwhite	Female	135	3.0	52.6	44.4
		Male	128	12.5	45.3	42.2
29. Can people reduce their chances of becoming infected with the AIDS virus by having sexual intercourse only with one person not infected with the AIDS virus?	White	Female	480	81.9	9.6	8.5
		Male	429	84.8	7.5	7.7
	Nonwhite	Female	134	64.2	11.9	23.9
		Male	128	75.0	10.2	14.8
30. Can people reduce their chances of becoming infected with the AIDS virus by not having sexual intercourse with a person who uses illegal drugs that can be injected?	White	Female	481	83.6	8.5	7.9
		Male	428	82.0	9.3	8.6
	Nonwhite	Female	135	70.4	14.8	14.8
		Male	128	63.3	16.4	20.3
31. Can people reduce their chances of becoming infected with the AIDS virus by taking birth control pills?	White	Female	479	3.5	82.3	14.2
		Male	429	6.3	81.8	11.9
	Nonwhite	Female	135	5.9	74.1	20.0
		Male	128	4.7	72.7	22.7

NOTE: The Black, non-Hispanic; Hispanic; American Indian/Alaskan Native; Asian/Pacific Islander; and other ethnic classifications were collapsed to form the nonwhite category to allow comparisons across data collection efforts.